

US EPA ARCHIVE DOCUMENT

land revitalization

Region 5 Land Revitalization Technical Assistance Project

GREEN BUILDING AND HISTORIC PRESERVATION CASE STUDIES FOR MOLINE MULTI-MODAL STATION PROJECT (3 OF 5)

EPA provided technical assistance support to the City of Moline, Illinois in the areas of green building and historic preservation for the Moline Multi-Modal Station Project. This assistance was intended to strengthen the HUD-DOT-EPA Partnership for Sustainable Communities by providing the City of Moline access to technical resources and expertise. EPA's technical assistance activities focused on the development of five case studies on the renovation of existing/historic structures to meet Leadership in Energy and Environmental Design (LEED) standards for multi-modal transportation projects, where possible. These five case studies were presented at the Moline Developer Workshop held on October 18, 2011. This is the third case study in the series.

UPTOWN STATION NORMAL, ILLINOIS

Project Summary

The Normal, Illinois Uptown Station, located in the town's Central Business District, will serve as a hub for numerous modes of transportation including Amtrak passenger rail, intercity bus, local mass transit, automobiles, intra-community shuttles, taxis, airport shuttles, as well as bicycles and pedestrians. It adjoins a future "Gateway Plaza," a public commons to be located between the transportation center and the Children's Discovery Museum, and includes the following spaces:

- First floor: ticketing, waiting and baggage areas; coffee vendor, newsstand, retail kiosks
- Second/third floors: Normal municipal offices
- Fourth floor: City Council chambers, multi-purpose meeting rooms available for public use
- Attached 400-space parking deck with bus bays on ground level and areas for taxis and shuttle service
- 760-linear-foot rail platform with permanent canopy on the south side of the building

The project, a new mixed-use facility with an active, pedestrian friendly retail frontage, parking and institutional/office space, will achieve the following goals consistent with downtown redevelopment planning:

- Provide full access to the downtown area without expanding the roadway network, by reducing auto-dependency;



Rendering of Uptown Station
(Source: RATIO Architects)

Project Description

Elements: Transit, Historic Community, Green

Size of Community Served:

- McLean County (2010) = 168,611
- Within 50 Miles = 903,465

Current Owner: Town of Normal

Square Footage: 63,000 + 400 parking spaces

Original Construction Date: N/A

Historic Designation: N/A

Project Completion Date: 2012

Construction and Project Costs: \$35 Million
Building Construction, \$47.4 Million Project Cost

LEED or Other Green Certification:

Targeted LEED 2009 NC Silver

- Maximize transportation options and transfers between modes of transit, and provide a pleasant and comfortable environment for users; and
- Serve as a gateway into a revitalized downtown.

Historic Features

Seven sites that are potentially eligible for the National Register of Historic Places are located within or near the new transportation corridor. Review by the Illinois Historic Preservation Agency determined that no historic properties will be affected by the proposed project. In addition, the Town of Normal has invested a significant amount in restoring nearby historic buildings.

Green Features

Uptown Station will be one of the most energy efficient public buildings in downstate Illinois and part of an area that received Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) Silver certification (Stage 2). As such, sustainable design features incorporated into Uptown Station include:

- **Site Sustainability** – brownfield redevelopment, heat island reduction, and alternative transportation
- **Provisions for Transit** – including bicycles and low-emission vehicles
- **Water Efficiency** – water-efficient landscaping and facility water use reduction
- **Energy Efficiency** – energy-efficient HVAC systems and potential use of green power sources
- **Construction Materials** – low construction waste and use of recycled and locally-sourced materials
- **Indoor Environmental Quality** – design features to enhance thermal comfort and access to natural light



Adjacent public plaza and roundabout provides stormwater treatment for the area (Source: Scott Shigley)

Challenges and Solutions

Former Brownfield

The site was formerly an auto repair/gas station and a drycleaners. Excavated materials were disposed of as special waste. A roadway agreement assures that any future excavation on the adjacent roadway (where pollutants migrated) will also have special disposal. EPA provided grant money to study the site and determine remediation requirements.

Partnerships and Funding Strategies

The Town of Normal initiated and led this project and developed the funding strategies. The project was supported by the Illinois State University, Economic Development Council, City of Bloomington, McLean County, Regional Planning Commission, B-N Public Transit, pedestrian and bicycle advocacy groups, labor organizations and major employers in the region. In addition, the State of Illinois provided over \$1 million in grants. Four intercity bus providers—Greyhound, Burlington Trailways, Peoria Charter, and MegaBus—have supported the project and plan to utilize the facility.

The funding for the \$35 million building cost is as follows:

- \$22 million in TIGER Grant funds (of which \$1 million goes toward the adjacent public plaza)
- \$6,723,000 from the Federal Transit Administration (5309 Bus Funds and other earmarks)
- \$6,277,000 in Town Funding (city bonds)

Leverage Financing Opportunities

The town will own the entire building, but will lease space to Amtrak and private entities, such as food vendors and a parking management company. The lease with Amtrak is expected to offset the utility costs for the first floor area.

Costs Attributed to LEED

The Town Council has a history of valuing LEED as a measure of green dating back to a 2003 ordinance requiring all new buildings in the Uptown area with a footprint of 7,500 SF or greater to be LEED Certified at a minimum. The Children's Museum, which is owned by the town and adjacent to Uptown Station, was completed in 2005 and certified as LEED Silver. Two privately built and owned buildings in uptown are also LEED certified. Costs attributed to LEED are not identified and design elements considered to be expensive, such as on-site renewable energy, are not being pursued.

Project Effect on Neighborhood

Ongoing redevelopment enhances the economic competitiveness of the Town of Normal and beyond, including the Bloomington-Normal metropolitan region and the rural areas of McLean County. Redevelopment is a key ingredient to local and regional economic success. Uptown Station is the primary component of Normal's uptown redevelopment effort and essential to attracting businesses, residents, and visitors.

Uptown Station will also be a significant driver for continued mixed-use redevelopment in Normal's central business district. Traveling through one centralized hub, users of Uptown Station will access the central business district more easily. This large influx of people will increase pedestrian density, which in turn will stimulate economic activity.

Area redevelopment has already included a Children's Discovery Museum, Marriott Hotel and Conference Center, and roughly 20 other private commercial and residential projects, many of which have achieved some level of LEED certification. Uptown Station itself

will also accommodate retail and community space. Significantly, this expansion of mixed-use development provides an opportunity for greater economic growth. New businesses, cultural institutions, and other activity centers supplied with workers and consumers will increase overall economic activity in the region. One way to represent this activity is by the increase in property values tied to the proposed station's development and the expected long-term increase in train operations and passenger volumes. These cumulative efforts are referred to as joint development opportunities and will contribute to an ongoing, more than \$80 million initiative to improve Midwestern passenger rail, including the Chicago-to-St. Louis corridor. Having a diversified economy will also provide the Town of Normal relative stability during times of economic uncertainty.

Sources for Additional Information

For more information on this multimodal project, please see the project website: www.normal.org/TransportationCenter/default.html.

Project Contact

For more information on the Normal, Illinois multimodal project, please contact:

Wayne Aldrich, Development Director

Town of Normal
waldrich@normal.org
(309) 454-9760

Mark Peterson, City Manager

Town of Normal
mpeterson@normal.org
(309) 454-9503

Scot Williams, Commercial Building Inspector

Town of Normal
swilliams@normal.org
(309) 454-9581

Ed Scopel, Project Architect

RATIO Architects
EScopel@ratioarchitects.com
(217) 352-7696



Uptown Station under construction
(Source: Town of Normal)

LEED Credit Documentation Matrix :

Normal Multimodal Transportation Center-Silver

Active
Complete
Responsibility

Yes Poss. No

39	0	27	Total Project Score	Possible Points	14	Action Items
11	0	3	Sustainable Sites	Possible Points	14	
Y			Prereq 1 Construction Activity and Pollution Prevention	0		Architect
Y			Credit 1 Site Selection	1		Landscape Architect
Y			Credit 2 Development Density & Community Connectivity	1		Architect
Y			Credit 3 Brownfield Redevelopment	1		Architect
Y			Credit 4.1 Alternative Transportation, Public Transportation Access	1		Architect
Y			Credit 4.2 Alternative Transportation, Bicycle Storage & Changing Rooms	1		Architect
Y			Credit 4.3 Alternative Transportation, Low Emitting & Fuel Efficient Vehicles	1		Client
Y			Credit 4.4 Alternative Transportation, Parking Capacity	1		Client
	N		Credit 5.1 Site Development, Protect or Restore Habitat	1		
	N		Credit 5.2 Site Development, Maximize Open Space	1		
Y			Credit 6.1 Stormwater Design, Quantity Control	1		Civil Engineer
Y			Credit 6.2 Stormwater Design, Quality Control	1		Civil Engineer
Y			Credit 7.1 Heat Island Effect, Non-Roof	1		Landscape Architect
Y			Credit 7.2 Heat Island Effect, Roof	1		Architect
	N		Credit 8 Light Pollution Reduction	1		
2	0	3	Water Efficiency	Possible Points	5	
	N		Credit 1.1 Water Efficient Landscaping, Reduce by 50%	1		
	N		Credit 1.2 Water Efficient Landscaping, No Potable Use or No Irrigation	1		
	N		Credit 2 Innovative Wastewater Technologies	1		
Y			Credit 3.1 Water Use Reduction, 20% Reduction	1		Plumbing Engineer
Y			Credit 3.2 Water Use Reduction, 30% Reduction	1		Plumbing Engineer
5	0	9	Energy & Atmosphere	Possible Points	17	
Y			Prereq 1 Fundamental Commissioning of the Building Energy Systems	0		Commissioning Agent
Y			Prereq 2 Minimum Energy Performance	0		HVAC Engineer
Y			Prereq 3 Fundamental Refrigerant Management	0		HVAC Engineer
Y			Credit 1.2 Optimize Energy Performance, 14% New/ 7% Existing	2		HVAC Engineer
	N		Credit 1.3 Optimize Energy Performance, 17.5% New/ 10.5% Existing	1		
	N		Credit 1.4 Optimize Energy Performance, 21% New/ 14% Existing	1		
	N		Credit 1.5 Optimize Energy Performance, 24.5% New/ 17.5% Existing	1		
	N		Credit 1.6 Optimize Energy Performance, 28% New/ 21% Existing	1		
	N		Credit 1.7 Optimize Energy Performance, 31.5% New/ 24.5% Existing	1		
	N		Credit 1.8 Optimize Energy Performance, 35% New/ 28% Existing	1		
	N		Credit 1.9 Optimize Energy Performance, 38.5% New/ 31% Existing	1		
	N		Credit 1.10 Optimize Energy Performance, 42% New/ 35% Existing	1		
	N		Credit 2 On-Site Renewable Energy	3		
Y			Credit 3 Enhanced Commissioning	1		HVAC Engineer
Y			Credit 4 Enhanced Refrigerant Management	1		HVAC Engineer
Y			Credit 5 Measurement & Verification	1		Client
Y			Credit 6 Green Power	1		Client
7	0	6	Materials & Resources	Possible Points	13	
Y			Prereq 1 Storage & Collection of Recyclables	0		Architect
	N		Credit 1.1 Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	1		
	N		Credit 1.2 Building Reuse, Maintain 95% of Existing Walls, Floors & Roof	1		
	N		Credit 1.3 Building Reuse, Maintain 50% of Interior Non-Structural Elements	1		
Y			Credit 2.1 Construction Waste Management, Divert 50% from Disposal	1		Contractor
Y			Credit 2.2 Construction Waste Management, Divert 75% from Disposal	1		Contractor
	N		Credit 3.1 Material Reuse, 5%	1		
	N		Credit 3.2 Material Reuse, 10%	1		
Y			Credit 4.1 Recycled Content, 10% (post-consumer + 1/2 pre-consumer)	1		Contractor
Y			Credit 4.2 Recycled Content, 20% (post-consumer + 1/2 pre-consumer)	1		Contractor
Y			Credit 5.1 Regional Materials, 10% Extracted, Processed & Manufactured Regionally	1		Contractor
Y			Credit 5.2 Regional Materials, 20% Extracted, Processed & Manufactured Regionally	1		Contractor
	N		Credit 6 Rapidly Renewable Materials	1		
Y			Credit 7 Certified Wood	1		Contractor
13	0	2	Indoor Environmental Quality	Possible Points	15	
Y			Prereq 1 Minimum IAQ Performance	0		HVAC Engineer
Y			Prereq 2 Environmental Tobacco Smoke (ETS) Control	0		Client
Y			Credit 1 Outdoor Air Delivery Monitoring	1		HVAC Engineer
	N		Credit 2 Increased Ventilation	1		
Y			Credit 3.1 Construction IAQ Management Plan	1		Contractor
Y			Credit 3.2 Construction IAQ Management Plan	1		Contractor
Y			Credit 4.1 Low-Emitting Materials, Adhesives & Sealants	1		Contractor
Y			Credit 4.2 Low-Emitting Materials, Paints & Coatings	1		Contractor
Y			Credit 4.3 Low-Emitting Materials, Carpet Systems	1		Contractor
Y			Credit 4.4 Low-Emitting Materials, Composite Wood & Agrifiber Products	1		Contractor
Y			Credit 5 Indoor Chemical & Pollutant Source Control	1		HVAC Engineer
Y			Credit 6.1 Controllability of Systems, Lighting	1		Electrical Engineer
Y			Credit 6.2 Controllability of Systems, Thermal Comfort	1		HVAC Engineer
Y			Credit 7.1 Thermal Comfort: Design	1		HVAC Engineer
Y			Credit 7.2 Thermal Comfort: Verification	1		Client
Y			Credit 8.1 Daylight & Views, Daylight 75% of Spaces	1		Architect
	N		Credit 8.2 Daylight & Views, Views for 90% of Spaces	1		
1	0	4	Innovation & Design Process	Possible Points	5	
	N		Credit 1.1 Innovation in Design	1		
	N		Credit 1.2 Innovation in Design	1		
	N		Credit 1.3 Innovation in Design (Garage Lighting scheme?)	1		
	N		Credit 1.4 Innovation in Design	1		
Y			Credit 2 LEED™ Accredited Professional	1		Project Team Admin.
39	0	27	Total Points Anticipated			
Certified: 26-32 Silver: 33-38 Gold: 39-51 Platinum: 52+						
Key: Y- Credit Attempted, Poss.-Possible N - Credit Not Attempted						